

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/29/98

Date Received: 06/18/98

Project: Metro Self Monitor, PO #M11446

Date Samples Extracted: 06/22/98

Date Extracts Analyzed: 06/22/98

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC  
USING METHOD 6010**

**Samples Processed Using Method 3005A  
Results Reported as mg/L (ppm)**

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M11446	0.43	0.37	0.46	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 806071-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	ug/L (ppb)	0.92	0.90	2	0-20
Copper	ug/L (ppb)	0.58	0.51	13	0-20
Nickel	ug/L (ppb)	0.88	0.90	2	0-20
Zinc	ug/L (ppb)	<0.05	<0.05	nm	0-20

Laboratory Code: 806071-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	ug/L (ppb)	5	0.92	101	92	80-120	9
Copper	ug/L (ppb)	5	0.58	97	90	80-120	7
Nickel	ug/L (ppb)	10	0.88	101	97	80-120	4
Zinc	ug/L (ppb)	5	<0.05	101	101	80-120	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	ug/L (ppb)	5	97	100	80-120	3
Copper	ug/L (ppb)	5	97	100	80-120	3
Nickel	ug/L (ppb)	10	101	102	80-120	1
Zinc	ug/L (ppb)	5	100	99	80-120	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

806106

6/18/98 11:00



Send Report To: Alaska Copper Works Contact Bernard Thompson  
Company 628 Hardside St  
Address Seattle WA 98134  
City, State, Zip (206) 382-8379 FAX # (206) 382-4509 Date 6-18-98  
Phone #

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	metro Self monitor	m 11446

SAMPLERS (signature)	PROJECT LOCATION
<i>[Signature]</i>	3200 6 <sup>th</sup> Ave S.

REMARKS	SAMPLE DISPOSAL INFORMATION
	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerald Thompson	ACW	6/18/98	10:30 AM
Received by: 	Charlene Jensen	FBI	6-18-98	10:30
Relinquished by:				
Received by:				

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

**June 29, 1998**

**DUPLICATE COPY**

**INVOICE #98ACU0629-1**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

**RE: Project Metro Self-Monitor, PO# M11446: Results of testing requested  
by Gerry Thompson for material submitted on June 18, 1998.**

**1 water sample analyzed for  
Chromium, Copper, Nickel, and Zinc  
using Method 6010 @ \$65 per sample**

**\$ 65.00**

**Amount Due .....**

**\$ 65.00**

**FEDERAL TAX ID**

**(b) (6)**

FRIEDMAN & BRUYA, INC.

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June 29, 1998

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

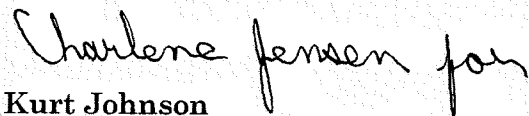
Dear Mr. Thompson:

Included are the results from the testing of material submitted on June 18, 1998 from your Metro Self Monitor, PO #M11446 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson  
Chemist

Enclosures  
ACU0629R.DOC